

CORNELL UNIVERSITY OFFICIAL PUBLICATION

Announcement of the
**Graduate School
of Education**
for 1939-40



VOLUME 30 : APRIL 1, 1939 : NUMBER 16

THE UNIVERSITY CALENDAR

1939-40

1939

FIRST TERM

Sept.	18, <i>Monday</i> ,	Entrance examinations begin.
Sept.	25, <i>Monday</i> ,	Registration and assignment, new students.
Sept.	26, <i>Tuesday</i> ,	Registration and assignment, old students.
Sept.	28, <i>Thursday</i> ,	Instruction begins at 8 A.M.
Oct.	19, <i>Thursday</i> ,	Last day for the payment of tuition for the first term.
Nov.	29, <i>Wednesday</i> ,	Instruction suspended at 4 P.M. (<i>Thanksgiving Recess</i>)
Dec.	4, <i>Monday</i> ,	Instruction resumed at 8 A.M.
Dec.	20, <i>Wednesday</i> ,	Instruction suspended at 4 P.M.

1940

(*Christmas Recess*)

Jan.	4, <i>Thursday</i> ,	Instruction resumed at 8 A.M.
Jan.	11, <i>Thursday</i> ,	Founder's Day.
Jan.	29, <i>Monday</i> ,	Final examinations begin.
Feb.	7, <i>Wednesday</i> ,	Final examinations end.
Feb.	8, <i>Thursday</i> ,	A holiday.

SECOND TERM

Feb.	9, <i>Friday</i> ,	Registration of all students.
Feb.	12, <i>Monday</i> ,	Instruction begins at 8 A.M.
March	4, <i>Monday</i> ,	Last day for the payment of tuition for the second term.
March	30, <i>Saturday</i> ,	Instruction suspended at 12:50 P.M. (<i>Spring Recess</i>)
April	8, <i>Monday</i> ,	Instruction resumed at 8 A.M.
May	--, <i>Saturday</i> ,	Spring Day: a holiday.
June	3, <i>Monday</i> ,	Final examinations begin.
June	11, <i>Tuesday</i> ,	Final examinations end.
June	17, <i>Monday</i> ,	COMMENCEMENT.

PUBLISHED BY CORNELL UNIVERSITY AT ITHACA, N. Y.

Monthly in September, October, and November
Semi-monthly, December to August inclusive

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GRADUATE SCHOOL OF EDUCATION

FACULTY

EDMUND EZRA DAY, S.B., A.M., Ph.D., LL.D., President of the University.
LIVINGSTON FARRAND, A.B., M.D., L.H.D., LL.D., President Emeritus.
FLOYD KARKER RICHTMYER, A.B., Ph.D., Dean of the Graduate School.
JULIAN EDWARD BUTTERWORTH, A.B., A.M., Ph.D., Director of the Graduate School of Education.

STAFF OF INSTRUCTION

HOWARD R. ANDERSON, Ph.D., Assistant Professor of Education (Teaching of the Social Studies).
THOMAS L. BAYNE, JR., Ph.D., Assistant Professor of Rural Education.
EMMA M. S. BESIG, Ph.D., Instructor in Education (Teaching of English).
CORA E. BINZEL, M.S., Professor of Rural Education.
JULIAN E. BUTTERWORTH, Ph.D., Professor of Rural Education.
ETHEL L. COWLES, A.B., Instructor in Rural Education.
THEODORE H. EATON, Ph.D., Professor of Rural Education.
LEWIS ELDRED, M.A., Chairman of the Bureau of Educational Service.
LYNN A. EMERSON, Ph.D., Professor of Industrial Education.
EMERY N. FERRISS, Ph.D., Professor of Rural Education.
FRANK S. FREEMAN, Ed.D., Professor of Education (Absent on leave, 1939-40).
LUELLE P. GARDNER, Ph.D., Instructor in Rural Education.
J. PAUL GREEN, B.A., Instructor in Rural Education.
MABEL HASTIE, B.S., Instructor in Rural Education.
EDWIN R. HOSKINS, Ph.D., Assistant Professor of Rural Education (Absent on leave, first term, 1939-40).
M. LOVELL HULSE, Ph.D., Assistant Professor of Education.
MARGARET HUTCHINS, M.A., Instructor in Rural Education (Absent on leave, 1939-40).
JAMES F. HUXTABLE, Instructor in Rural Education.
PHILIP G. JOHNSON, Ph.D., Assistant Professor of Education (Teaching of Science).
RIVERDA H. JORDAN, Ph.D., Professor of Education.
PAUL J. KRUSE, Ph.D., Professor of Rural Education (Absent on leave, second term, 1939-40).
M. L. W. LAISTNER, M.A., Professor of History.
CLYDE B. MOORE, Ph.D., Professor of Rural Education.
ROBERT M. OGDEN, Ph.D., Professor of Education.
ROY A. OLNEY, Ph.D., Assistant Professor of Rural Education.
E. LAURENCE PALMER, Ph.D., Professor of Rural Education.
WILLIAM A. SMITH, Ph.D., Assistant Professor of Rural Education.
PRESERVED SMITH, Ph.D., Litt.D., Professor of Medieval History.
ROLLAND M. STEWART, Ph.D., Professor of Rural Education (Absent on leave, second term, 1939-40).
FLORA M. THURSTON, Ph.D., Professor of Home Economics Education.
RALPH K. WHITE, Ph.D., Instructor in Education.
ANDREW L. WINSOR, Ph.D., Professor of Rural Education.

REPRESENTATIVES OF ACADEMIC GROUPS

OTIS F. CURTIS, Ph.D., Professor of Botany (1940).
CHARLES L. DURHAM, Ph.D., Litt.D., Professor of Latin (1939).
FRANK O. ELLENWOOD, A.B., M.E., Professor of Heat-Power Engineering (1941).
DONALD C. ENGLISH, M.B.A., Professor of Economics and Accounting (1941).
ROSSELL C. GIBBS, Ph.D., Professor of Physics (1941).
MARY F. HENRY, M.A., Assistant Director of the College of Home Economics (1940).

B. W. JONES, Ph.D., Assistant Professor of Mathematics (1941).
 ELMER S. SAVAGE, Ph.D., D.Sc., Professor of Animal Husbandry (1940).
 E. A. TENNEY, Ph.D., Assistant Professor of English (1939).

ASSISTANTS, 1938-39

CARL J. ANDERWALD, B.S.C.E., Assistant in Industrial Education.
 KENNETH V. CAREY, B.S., Assistant in Agricultural Education.
 L. ROBERT CRANE, B.S., Assistant in Agricultural Education.
 ALFRED E. DAVIES, B.S. in E.E., Assistant in Industrial Education.
 MARGARET ELLIOTT, B.S., Assistant in Home Economics Education.
 EVA GORDON, M.S., Assistant in Rural Education.
 CAROLINE E. HEASLY, B.S., Assistant in Rural Education.
 BARNEY KORCHIN, B.S., Assistant in Rural Education.
 JAMES H. LAMBERT, M.A., Assistant in Industrial Education.
 JOHN A. MACK, B.S., Assistant in Agricultural Education.
 RAY A. MURRAY, M.S. in Agr., Assistant in Agricultural Education.
 HAROLD L. NOAKES, B.S., Assistant in Agricultural Education.
 DON M. ORR, B.S., Assistant in Agricultural Education.
 LEON F. PACKER, B.S., Assistant in Agricultural Education.
 MILO J. PETERSON, M.S., Assistant in Agricultural Education.
 DELBERT J. PUGH, M.A., Assistant in Social Studies Education.
 VICTOR E. SCHMIDT, A.B., Assistant in Rural Education.
 HENRY L. SISK, M.A., Assistant in Rural Education.
 GLADYS WAFER, B.S., Assistant in Home Economics Education.
 WILLIAM D. WEBB, A.B., Assistant in Rural Education.
 HAROLD L. WENZEL, B.S., Assistant in Rural Education.
 ARVILLE S. WHEELER, M.A., Research Assistant in Rural Education.
 GEORGE A. WHITE, M.A., Assistant in Education.

COOPERATING TEACHERS IN THE ITHACA HIGH SCHOOL
1938-39

APGAR, CLARA S.	McCARGO, BERTHA
AXTELL, WILLIAM B.	McCLARTY, KATHERINE
BARTHOLOMEW, BERTHA	McINTYRE, LLOYD F.
BLISS, FRANK R.	NEWMAN, ADELINE
BUTLER, ELTON A.	PAGE, ELIZABETH
BUYSE, LEONARD	POLSON, RUTH
CATALFANO, SAMUEL	PORTER, HARRY W.
CLAFLIN, MAYFRED	RABOTNIKOFF, ABRAHAM
CLAPP, JANE S.	REIDY, MARGARET
CONLON, JOSEPHINE	RIGGS, MIRIAM
CROSBY, RICHARD C.	ROBINSON, LILLY
CURTIS, EMMA ROSE	SAVAGE, CLARA
DIXON, C. R.	SCIDMORE, ROBERT
GIBSON, ETHELWYN	THURBER, WALTER A.
GROMMON, ALFRED H.	WAITE, AGNES
HADLOCK, ELOISE T.	WARREN, MARIAN L.
HAFF, MILDRED W.	WELCH, CATHERINE M.
HEWITT, DOUGLASS	WEST, THERESA
HUBBELL, ROBERT	WILLIAMS, MILDRED
LEWIS, HELEN S.	WILLIAMSON, FLORENCE
	WRIGHT, ADELAIDE C.

GRADUATE SCHOOL OF EDUCATION

The Graduate School of Education is composed of The Department of Education in the College of Arts and Sciences and the Department of Rural Education in the College of Agriculture.

Although the organization is designated as a graduate school, and although most of the offerings are on the graduate level, the Graduate School of Education has responsibility also for professional courses in Education offered to undergraduates in the various colleges. Since there is no undergraduate College of Education at Cornell, the student on the undergraduate level who is preparing to teach will register in the College of Agriculture, in the College of Arts and Sciences, or in the College of Home Economics and must meet the standards of graduation set by that College.

FIVE-YEAR PROGRAM FOR THE PREPARATION OF SECONDARY SCHOOL TEACHERS

The student who enters the University in the Fall of 1939 with the intention of preparing for secondary school teaching will be expected to complete a five-year program. As heretofore, he will enter one of the undergraduate colleges and at the end of four years will normally receive a Bachelor's degree. Upon the satisfactory completion of the five-year program, a professional degree, Master of Education, will be awarded. Although the student who secures a Bachelor's degree before 1943* will not be required to follow this program, there will be opportunity for him to prepare himself on the basis of the new plan. Details regarding the admission of students to professional courses and to candidacy for the M.Ed. degree will be announced at a later date.

INFORMATION REGARDING ADVANCED DEGREES

1. The degrees of Master of Arts, Master of Science, and Doctor of Philosophy are administered directly by the Graduate School of Cornell University.
2. The degrees of Master of Education and Master of Science in Education are administered directly by the Graduate School of Education, under the jurisdiction of the Graduate School.

For detailed information regarding all advanced degrees, except the professional degrees of Master of Education and Master of Science in Education, consult the Announcement of the Graduate School.

*A recently announced regulation of the New York State Education Department specifies that teachers of academic subjects entering service after December 31, 1942, must have had five years of pre-service preparation.

ADMISSION

Students may be admitted to the Graduate School in one of the following three classes:

- (1) Resident Doctors;
- (2) Graduate students not candidates for degrees: "non-candidates";
- (3) Candidates for degrees.

Applications for admission, made on the proper forms, should be filed in the office of the Graduate School at the earliest possible date and, ordinarily, not later than August 10 and January 25 for entrance to the first and second terms, respectively; and not later than June 15 for entrance to the Summer Session.

An applicant who is not a graduate of Cornell University must submit complete official transcripts of all previous college studies.

To be admitted to the Graduate School, either as a non-candidate or as a candidate for a degree an applicant (1) must have received his baccalaureate degree from a college or university of recognized standing or have done work equivalent to that required for such degree; (2) as judged by his previous scholastic record, or otherwise, must show promise of ability satisfactorily to pursue advanced study and research; and (3) must have had adequate previous preparation in his chosen field of study to enter at once upon graduate study in that field.

Seniors in the colleges of Cornell University who have completed the academic requirements for the Bachelor's degree, and who qualify under (2) and (3), may, subject to the approval of the deans of their respective colleges, be admitted to the Graduate School.

Resident Doctors: Persons who hold the Doctor's degree or who have equivalent standing may, subject to permission from the Dean, be admitted to the Graduate School as Resident Doctors, for the purpose of engaging in advanced study and research in a field in which they have had adequate previous preparation. On the recommendation of the Dean, Resident Doctors are exempt from the payment of tuition and all fees except laboratory charges. Resident Doctors ordinarily are not permitted to attend classes.

Graduate Students Not Candidates for Degrees: Students admitted to the Graduate School usually pursue a course leading to one of the advanced degrees; but a properly qualified person who, for special reasons, does not wish to meet the requirements for a degree may be admitted to the Graduate School as a "non-candidate" and arrange a program of graduate study suitable to his purposes.

RESIDENCE

No student will be awarded any degree by Cornell University unless he has spent at least one full academic year, or the equivalent, in residence and study at the University as a candidate for that degree.

THE SPECIAL COMMITTEE

The work of each graduate student is in charge of a Special Committee. After the student has chosen his major and minor subjects, he must select one or more members of the faculty to represent each subject or field and to serve as the members of his Special Committee, the representative of his major subject being the chairman.

THE PROFESSIONAL DEGREES IN EDUCATION

Two professional degrees are offered, namely, Master of Education and Master of Science in Education. The former degree is granted upon the completion of a program of pre-service preparation for secondary school teaching; the latter, of a program for the preparation of special school officers. The programs leading to these degrees shall include such courses, seminars, projects and investigations of an advanced or graduate nature as will develop ability to perform acceptably the professional duties required of the several types of educational workers.

General Regulations Governing Both Degrees:

1. Under the general administration of the Director, the candidate shall choose two or more members of the Graduate Faculty as a Special Committee to direct his work. The Special Committee of a candidate for the degree of Master of Education should include a representative from the student's teaching field. The Special Committee of a candidate for the degree of Master of Science in Education may include a faculty member representing a field other than Education. In each case the Chairman shall be a member of the Education staff.

2. The office of the Graduate School of Education acts as an office of record, and the candidate for a degree shall, within ten days of his registration, file in writing a statement approved by his committee showing his plan of work and course of study.

3. The maximum period allowed for the completion of all requirements shall conform to the regulations of the Graduate School.

4. Prior to scheduling the final examination, each member of the Education staff under whom the candidate has had instruction shall be informed of the proposed examination, shall be asked to express an opinion regarding the candidate's fitness for such examination, and shall be invited to be present and to take part in the examination.

Master of Education Degree. The program for this degree is planned for students seeking *pre-service* preparation for teaching in the secondary school. There may be two types of candidates for this degree, as follows:

1. Those who, early in their University work, make definite plans whereby preparation for teaching may be carried through the four undergraduate years and a fifth year of advanced professional study. The general pattern for this five-year program is presented on pp. 17 and 18.

2. Those who wish to prepare for teaching even though they may have secured little or no professional training during their undergraduate years. Such persons may normally earn the degree by following a continuous program involving two summer sessions and the fifth year. The pre-professional and professional subjects shall be those included in the program outlined on pp. 17 and 18.

Note: The attention of *experienced* teachers is directed to the opportunity that exists under Plan B of the M.A., M.S., and M.S. in Agr. degrees to secure, through a flexible program, additional preparation for secondary school teaching.

Master of Science in Education degree. The various programs leading to this degree are planned primarily for those who, having had experience in teaching or other type of educational work, wish to prepare themselves for such specialized forms of service as supervision, counselling or the administration of an elementary, secondary, vocational or technical school. For the present, teachers of industrial arts and of industrial and technical subjects should also ordinarily seek this degree.

1. An approved program for this degree, in which Education shall constitute the major portion, must have unity in terms both of purpose and of sequential development.

2. The courses taken by the candidate should fall into three groups designated A, B, C. The determination of the groups into which particular courses fall will depend upon the professional purpose of the candidate in his graduate study and an integration of courses to such purpose.

GROUP A. This group includes courses of a special nature and of immediate interest, such as the technical courses in English, in the languages (or a language), history, sciences (or a science), agriculture (or a division thereof), etc., and the professional studies appropriate to the special field. It is expected that at least a third of the candidate's program will fall in this group.

GROUP B. This group includes courses in the theory and science of education which will furnish the several types of background that are warranted by the nature of courses in Group A. Courses to the extent of one-third of the total may be chosen in this group. Educational Psychology, including Measurement, History and Philosophy of Education and other courses necessary to integration, such as general studies appropriate to the organization and administration of schools at the several educational levels, are representative of this group.

GROUP C. This group includes courses intended to meet the particular needs of the candidate not adequately met in Groups A and B. In certain cases as much as a third of the candidate's program should be taken in this group.

For the selection of courses in all the above groups, the candidate should consult his special committee, whose approval is necessary.

3. The candidate is not required to present a formal thesis or essay; but, if he does not do so, he is expected to complete a problem to the satisfaction of his committee. If the candidate seeking a degree through summer session attendance does not present a thesis or an essay that complies with the standards and requirements for the degrees of Master of Arts or Master of Science, including deposit of two bound copies in the University Library through either the Graduate School or the Graduate School of Education, a fifth summer of work shall be required. It is expected that normally all work will have been taken at Cornell University. However, under exceptional circumstances, any necessary study beyond the required four summer sessions of residence may be done at some other institution of comparable standards but only when this work can be shown, to the satisfaction of the Special Committee, to be an integral part of the student's entire program.

4. The student's Special Committee, by the middle of the third summer of study (or by the end of the first term of graduate study), shall determine the fitness of the candidate to continue his candidacy for this degree through examination or such other suitable means as the committee may elect. The action of the Committee shall be recorded in the office of the Graduate School of Education.

OTHER MASTERS' DEGREES

Certain students in education may be interested in one of the following degrees: M.A., M.S., M.S. in Agr. There are two procedures by which any of these degrees may be secured, called Plan A and Plan B. Plan A is intended primarily for those candidates who, by suitably restricting their graduate work to a given field, wish to acquire some degree of competence in that field, frequently as a basis for further study and research or for professional purposes. Plan B is designed for those who wish a somewhat broader training than is permitted in Plan A.

THE DEGREE OF DOCTOR OF PHILOSOPHY

Work leading to the Ph.D. degree is designed primarily to give the candidate a thoroughly comprehensive view of a field of knowledge; to train him in methods of research and scholarship in that field; and to develop qualities of leadership and a feeling of responsibility to add to the sum total of knowledge in his field. The requirements for the degree include, in addition to the requirements in foreign language, (1) six terms of residence as a graduate student, (2) the satisfactory completion, under the direction of a Special Committee, of work in one major subject and two minor subjects, (3) the presentation of an acceptable thesis, and (4) the passing of a qualifying examination and a final examination.

Major and Minor Subjects. A candidate for Ph.D. must select a major subject and two minor subjects properly related to the major subject. A list of approved major and minor subjects in each of the several fields of graduate study will be found in the Announcement of The Graduate School. *There are no requirements in semester hours for the Ph.D. degree.*

Requirements in Foreign Languages. Each candidate for Ph.D. must demonstrate his ability to read both French and German (or two languages, other than English, approved by his Special Committee), by passing in each of these languages an examination given by a member of the Language Examination Board.

A candidate for Ph.D. is expected to meet the foreign language requirements at the beginning of his candidacy at Cornell University for that degree. A minimum of seven terms of residence is required of a candidate who does not pass at least one language examination at this time. A minimum of three terms of residence is required after completion of all language requirements, except in the case of a student admitted to candidacy with two or more terms of residence credit; in such case, a minimum of two terms is required.

Language examinations passed within one month after registration are considered as being passed at the time of registration.

Additional requirements in foreign language may be made at the discretion of the student's Special Committee.

Residence. For Ph.D. a minimum of six terms of residence is required; or seven terms if the candidate does not pass one of the examinations in foreign language (see requirements in foreign language) on beginning candidacy at Cornell University. Upon the recommendation of the student's Special Committee residence up to a maximum of four terms may be credited toward the doctor's degree for work done in other universities.

Personal Direction. A candidate for the Ph.D. degree who has demonstrated ability in graduate studies may, upon recommendation of his Special Committee and with the approval of the Dean, work during the summer under the personal direction of a member of the faculty of the Graduate School. The privilege of working under Personal Direction will not ordinarily be granted to a student until he has completed at least a full year of graduate work in regular sessions.

Credit toward the Ph.D. degree earned in Summer Sessions at Cornell or elsewhere is limited to two terms. A candidate who has already earned two terms of credit by work in summer sessions and who has demonstrated ability in graduate work, may, however, upon the recommendation of his Special Committee and with the approval of the General Committee, earn two more terms of credit by working under Personal Direction. But the last year of residence must be in regular academic sessions and in successive terms.

Thesis Requirement. The thesis for the Doctor's degree must give evidence of the candidate's power to carry on independent investigation and must be satisfactory in style and composition. The thesis must be acceptable to the candidate's Special Committee in respect of both scholarship and literary quality. The completed thesis must be in the hands of the Special Committee at least fifteen days before the final examination for the Doctor's degree; and, during the five days immediately preceding this examination a typewritten copy approved by all members of the Special Committee, shall be on file in the office of the Graduate School.

Qualifying Examination. Each candidate for Ph.D. must pass a qualifying examination given by his Special Committee. The examination is ordinarily given at the end of the first year of graduate study, if that year is at Cornell. If the candidate has had one year or more of graduate work elsewhere, the qualifying examination should be given as soon as possible after his entrance into the Graduate School.

Before presenting himself for Final Examination B or C (see next paragraph), each candidate must have earned at least two terms of residence credit after the passing or the waiving of the qualifying examination.

Final Examination. Each candidate for Ph.D. must pass a final examination, conducted by his Special Committee and covering (1) the major and minor subjects and (2) the thesis and related topics.

At the discretion of the Special Committee, the two parts of this examination may be given either separately or in combination.

When the two parts are given separately, an examination, dealing mainly with the major and minor subjects and designated as Final Examination A, may be given at the end of the fourth term of candidacy, or thereafter. Final Examination B, on the thesis and related topics and on such other work as the student may have done after completing Examination A, will be given after the residence requirement has been satisfied and the thesis has been completed and filed.

When the two parts of the final examination are given in combination, the combined examination, designated as Final Examination C, will be given after the residence requirement has been satisfied and the thesis has been completed and filed.

WORK IN SUMMER SESSION

A statement of graduate work offered during the Summer Session of Cornell University will be found in the Announcement of the Summer Session.

Credit toward advanced degrees may be earned in Summer Sessions in accordance with the following conditions and rules.

For A.M., M.S., M.S. in Agr., and Ph.D. residence during Summer Sessions may be counted at the rate of three Summer Sessions for one term of credit, and five sessions for two terms; for all other advanced degrees at the rate of two Summer Sessions for each term of credit.

Since Cornell University grants no advanced degree for less than two terms of residence and work in the Graduate School and since the minimum residence requirement for masters' degrees is two terms, work in Summer Sessions elsewhere can not be counted toward masters' degrees at Cornell.

The credit toward the Ph.D. that may be earned in Summer Sessions at Cornell University or elsewhere is limited to two terms. A candidate who has demonstrated unusual ability in his graduate studies, however, may, upon recommendation of his Special Committee and upon approval by the General Committee, earn a maximum of two more terms by work in the summer under Personal Direction. But the last year of candidacy for Ph.D. must be spent in residence at the University and in consecutive, regular sessions.

To obtain residence credit in the Graduate School for Summer Session work the candidate must register both in the Summer Session and in the Graduate School. He must file in the office of the Graduate School within one week after registration a statement-of-courses blank, as provided for students in the regular session.

TUITION FEES IN THE GRADUATE SCHOOL

A tuition fee of \$150 for the academic year is to be paid by all students registered in the Graduate School. It is payable in installments of \$75 at the beginning of each term.

Certain classes of students are exempt from the payment of the tuition fee. They are:

- (1) Graduate students holding certain appointments as University Fellows or Graduate Scholars, and holders of certain temporary fellowships and scholarships.
- (2) Resident Doctors upon recommendation of the Dean.
- (3) Certain members of the instructing staff. See the Announcement of the Graduate School for 1939-40.

A member of the teaching staff registered in the Graduate School, whose salary equals or exceeds \$1500 shall pay tuition at the rate of three-quarters of the tuition regularly charged full-time students.

A matriculation fee of \$11, an administration fee of \$12.50 a term, a health and infirmary fee of \$6 each term, a Willard Straight Hall fee of \$5 each term, and a graduation fee of \$20 are also charged. A thesis fee of \$10 is required of each candidate for the Ph.D. degree.

Any tuition or other fee may be changed by the Board of Trustees to take effect at any time without previous notice.

TUITION FEES IN THE UNDERGRADUATE COLLEGES

Facts regarding tuition fees in the several schools and colleges of the University can be found in the General Information Number.

GRADUATE FELLOWSHIPS, SCHOLARSHIPS, AND ASSISTANTSHIPS

Financial assistance to students in the various phases of the work of the Graduate School of Education is available as indicated below. These aids are granted only to students matriculated in the Graduate School who, in addition to adequate preparation in general subjects, in an appropriate special field, and in Education, *have had a sufficient amount of successful teaching or other professional experience* that they are warranted in seeking further preparation for educational leadership.

Free tuition in the Graduate School is given in addition to the cash awards, except as indicated.

The amount and character of the service required of the holder of an assistantship varies, but information on this point may be secured upon request.

1. *Agricultural Education.* One \$1000 and one \$800 assistantship normally available only to those who are candidates for the doctorate. It is essential that the candidate shall have had satisfactory teaching experience in vocational agriculture and, preferably, assistantship or teaching relationships in a teacher-training institution.

2. *Education.* One \$500 assistantship open to students interested in certain general phases of Education, especially educational psychology, mental measurement, secondary school methods, or secondary school administration.

3. *Educational Psychology*. Two \$750 assistantships granted to persons well advanced in their preparation in educational psychology.

4. *English, Teaching of*. One \$500 assistantship to a person of experience preparing for a leadership position in this field.

5. *Industrial Education*. Not to exceed four assistantships at not more than \$600 each available to persons preparing themselves for leadership in vocational industrial education.

6. *Nature Study and Science Education*.

a. One \$800 fellowship in nature education open to a person with teaching experience and one year of graduate work who is a trained field naturalist and is prepared to take the language examinations. Work will deal with Conservation Education in schools. Free tuition is not included.

b. One \$500 fellowship in nature education available to students with qualifications similar to "5a" but not required to be prepared to meet more than one language requirement at time of entrance. Free tuition is not included.

c. One \$500 assistantship to a person of experience preparing for a leadership position in the teaching of science.

d. One \$500 assistantship granted to a person of superior training and teaching ability for part-time assistance in the practice teaching program carried on in the Ithaca High Schools.

7. *Rural Education*.

a. Two \$1000 research assistantships in Rural Education available to persons wishing to prepare themselves for professional service to communities under 4500 population. Normally these assistantships will be granted only to candidates for the doctorate who are within approximately one year of completing the requirements for that degree, who have a reading knowledge of two foreign languages, preferably French and German, and who submit a well-planned project in research.

b. Four \$350 assistantships available to graduate students majoring in any phase of the work of the Department of Rural Education.

c. Five honorary scholarships in Rural Education, available to persons of superior qualifications, residents of New York State, seeking preparation for public school service in the field of rural education. Preference will be given to (1) principals and teachers in the public schools of New York State, located in places of less than 4500 population or (2) members of the staff of any New York State normal school or teachers college, who have been granted a leave of absence for a year of graduate study.

8. *Social Studies Education*.

a. Two \$750 assistantships granted to persons of superior training and teaching ability for part-time assistance in the practice teaching program carried on in the Ithaca High Schools.

b. One \$500 assistantship granted to a person of experience preparing for a position of leadership in the teaching of the social studies.

9. *Edward A. Sheldon Scholarship for Women Teachers.* This scholarship may be awarded "to any woman of suitable qualifications who needs this assistance", preference being given candidates in this order: first, a woman graduate of the normal school at Oswego, N. Y.; second, a woman graduate of any other normal school in the state; third, a suitably qualified woman who is preparing to teach. The income from this scholarship for 1939-40 will be approximately \$120. Free tuition is not included.

BUREAU OF EDUCATIONAL SERVICE

A Bureau of Educational Service is maintained by the Graduate School of Education. Its purpose is to assist men and women who have studied or are studying at Cornell University to secure positions in educational work. Such persons are invited to register with the Bureau. Address: Bureau of Educational Service, 102 Stone Hall, Ithaca, N. Y.

THE SUMMER SESSION

The term of the Cornell University Summer Session covers a period of six weeks from early July to the middle of August. A wide range of courses is offered for those in educational work. Prospective students should apply to the Director of the Summer Session for a copy of the official announcement.

PROFESSIONAL PROGRAMS FOR THE PREPARATION OF VARIOUS TYPES OF EDUCATIONAL WORKERS

Included in the courses described on pages 19-28, are some of a general nature, such as Educational Psychology, Principles of Curriculum Building, and Philosophy of Education, that may be considered essential to the adequate preparation of any type of educational worker. Other courses, such as The Teaching of Agriculture, Seminar in Home Economics Education, and Seminar for Principals, being more specific, are largely useful in the preparation of special types of workers. These general and special professional courses, together with appropriate offerings from other departments and colleges of the University, may be combined into a variety of curricula for meeting the needs of various types of educational officers. In the following outline are listed those workers for whom curricula have been planned at Cornell. Some of these curricula are presented in the following pages; others may be secured upon request, while a few will be set up in the light of the individual student's educational background.

Groups 1-4 include those educational positions for which preparation at Cornell is (except for those now following a four-year

program for secondary school teaching) upon the level represented by a professional Master's degree.

1. Teachers of:

(For groups a, b, and c, see pages 16-18 for outlines of the present four-year and the new five-year programs)

 - a. Academic subjects: English, French, German, Latin, Mathematics, Science, Social Studies
 - b. Agriculture
 - c. Home Economics
 - *d. Industrial subjects
 - *e. Industrial arts (Summer Sessions only)
2. Supervisors of:
 - *a. Agriculture
 - *b. Elementary school subjects
 - *c. Home Economics
 - *d. Industrial subjects
 - *e. Industrial arts (Summer Sessions only)
3. Administrators:

(For a, b, and c, see curricula outlined on pages 18 and 19)

 - a. Principals of elementary schools
 - b. Principals of secondary schools
 - c. Principals of small village, central or consolidated schools
 - *d. Principals of vocational or technical schools
 - *e. Directors of vocational education
 - *f. Superintendents (See page 19)
4. Other special officers:
 - *a. Guidance counsellors (Summer Sessions only)
5. Officers concerned with teacher education:

Such officers must usually secure preparation represented by a Ph.D. degree or its equivalent. For each student an individual program is planned by the student and his Special Committee. (For approved major and minor subjects, see the Announcement of the Graduate School). At the present time preparation on the Doctoral level may be secured in at least the following fields:

 - a. Trainers of teachers in certain academic subjects, particularly nature study and science education, and social studies.
 - b. The vocational fields of agriculture, home making, and industrial education.
 - c. Certain general Education fields, such as elementary education, rural education, secondary education, and such special Education subjects as administration, educational psychology, home economics education and supervision.

THE FOUR-YEAR PROGRAM FOR SECONDARY SCHOOL TEACHERS

To meet the requirements of the State of New York for teaching in the secondary schools, the candidate is required to complete 18 semester hours in Education. The following program, approved by the State Education Department, gives information as to the specific courses through which these professional requirements may be met.

Educational Psychology	3 hours
Ed.* I or R. E.* III or R. E. II2	

*Outlines of special curricula or suggestions regarding desirable courses may be secured upon request.

Principles of Education	3 hours
Ed. 2 or R. E. 181	
Methods, Observations, Teaching, and Extra-instructional Problems.	9 hours
These are integrated units of work which may be met, for the various groups of teachers through the following courses :	
Teachers of Agriculture: R. E. 131, R. E. 132, and R. E. 133.	
Teachers of English, Science, and Social Studies: Ed. 4a or R. E. 121, Ed. 4b (including R. E. 126 for Science Teachers), and Ed. 4c.	
Teachers of Home Making: R. E. 135, R. E. 136, and R. E. 137.	
Teachers of Latin and French: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4f or Ed. 4g.	
Teachers of other approved subjects: Ed. 4a, Ed. 4c, Ed. 4d, and Ed. 4e.	
Elective	3 hours
Teachers of Homemaking are required to take R. E. 117 (Psychology of Childhood and Adolescence). Others may choose a three-hour course in Education or Educational Psychology, subject to the approval of their adviser in the Graduate School of Education.	

In addition, the prospective high school teacher must present a minimum number of semester hours of University credit in the subject matter field he plans to teach. If he is working in a special field, such as Agriculture or Homemaking, he must have 36 hours of credit in approved professional-technical courses in his special subject. For teaching English, the minimum requirement is 18 hours; for any foreign language, it is 18 hours based upon 3 units of entrance credit; for History, 18 hours based upon 2 units of entrance credit; for Mathematics, 15 hours based upon 2 units of entrance credit; for Science, 30 hours; for Biological Science, 18 hours; for Physical Science, 18 hours; for Social Studies, 30 hours.

As early as possible in his course, the student who is planning to prepare for teaching should consult that member of the staff of the Graduate School of Education most directly concerned with the teaching of his subject.

The courses suggested above are the ones that are normally expected to be used in meeting certification requirements. Substitutions should be made only with the approval of the appropriate adviser in the Graduate School of Education.

Requirements for certification vary from state to state. These variations are so marked that adequate information cannot be given in brief space. It is the intention of the School to offer such courses as will insure qualification for teaching certificates generally but in many cases this will involve the working out of special programs for individual students. Accordingly, students are advised to communicate with the office of the Graduate School of Education for information regarding their special needs.

THE FIVE-YEAR PROGRAM FOR SECONDARY SCHOOL TEACHERS

Freshman Year

Basic Course in General Social Studies..... 6 hours
(Freshman or Sophomore Year)

Sophomore Year

Human Growth and Development..... 6 hours

First tentative selection of prospective teachers

*"Ed." refers to courses offered in the Department of Education; "R.E.", to courses offered in the Department of Rural Education.

Junior Year

Educational Psychology	3 hours
Social Foundations of Education	3 hours
Second selection of prospective teachers	

Senior Year

The Art of Teaching: Curriculum, Materials, Method, Evaluation, Directed Observation and Teaching.....	6-8 hours
School Organization, Extra-Instructional and Professional Relations and Problems	2 hours
(Senior or Fifth Year)	
Final selection of prospective teachers	

Fifth Year

Apprentice Teaching	2-5 hours
Philosophy of Education	2 hours
Seminar in Problems of Teaching	2 hours
Electives	2-5 hours
Psychology Applied to Problems of Teaching; Psychology of Adolescence; History of Education; Tests and Measurements; Curriculum; or other approved courses	

The remainder of the student's program will be made up of: (a) courses required by the college in which the student is registered; (b) courses in the field or fields in which he plans to teach; (c) courses helpful in developing understandings and appreciations of particular significance to teachers.

PRINCIPALS

The following programs prepare for three kinds of principalships. Each program is divided into three groups of courses: (1) a required group of 12 hours; (2) a preferred-elective group of 6-12 hours; (3) a general elective group of 6-12 hours. While these programs have been prepared with New York certificate requirements in mind, they may be adapted to meet the requirements of other states.

		Type of principal's certificate		
		Elementary	High School	12-grade
1. Required group—12 hours				
1. Administration				
General (R. E. 261).....				x
High School (Ed. 5).....			x	
Elementary school (Ed. 23).....	x			
2. Curriculum (R. E. 276).....	x	x		x
3. Educational Measurements (R. E. 251) ..	x	x		x
4. Mental Measurement (Ed. 7).....	x	x		x
5. Seminar (R. E. 265).....	x	x		x
6. Supervision (R. E. 263).....	x	x		x
2. Preferred elective group—6-12 hours (Selection will be made for each type of certificate in the light of the candidate's needs)				
1. Child Activity Education (R. E. 122)				
2. Economics and the School (Ag. Econ. 238)				
3. Elementary Curriculum (R. E. 276a)				
4. Elementary Supervision (R. E. 266)				
5. Extra-class Activities (Ed. 11)				

6. Guidance (Ed. 28)
7. High School Administration (advanced)
(Ed. 10)
8. High School Curriculum (R. E. 276b)
9. Mental Hygiene (Hygiene 1)
10. Problem Child (Ed. 12)
11. Philosophy of Education (R. E. 294)
12. Principles and Practices of Vocational Education (R. E. 267c)
13. School and Community (R. S. O. 124)
14. School Finance (R. E. 262a)
3. General Elective Group—6–12 hours
These electives may be chosen from academic subjects, from Group 2, or from other advanced professional courses. Selection should be so made that an integrated program for each candidate will be achieved.

New York State provides for both *provisional* and *permanent* certificates. Since there are many specific requirements for the different types of certificates, the interested student should study Certification Bulletin No. 1 of the State Education Department, entitled "Certificates for Administrative and Supervisory Service".

SUPERINTENDENTS

New York State now requires that a superintendent, whether of a rural or of an urban district, shall be a graduate of a college or of a university and, in addition, that he shall have completed thirty semester hours of graduate work. "The total program of undergraduate and graduate courses shall include twenty semester hours in approved Education courses, eight of which shall be in courses related to administration or organization and in school supervision."

The complexity of modern educational problems requires that the educational leader not only be well versed in educational theory and practice but that he have a broad background in the fields of economics, sociology, and government. Cornell's resources are unusually complete for the preparation of district and county superintendents (or other types of rural school administrators) and superintendents of villages and small cities.

COURSES OF INSTRUCTION

In the **Department of Rural Education** courses are grouped by decades: General, 1–10; Psychology, 11–20; Method, 21–40; Preparation of Teachers for Normal Schools and Colleges, 41–50; Measurement and Statistics, 51–60; Administration and Supervision, 61–80; Theory of Education, 81–100. **All courses numbered under 100 are intended primarily for underclassmen; those from 101–200 are primarily for upperclassmen and graduate students; while those numbered 201 and over are primarily for graduate students.**

It should be noted that courses carrying the same name are not necessarily equivalents.

GENERAL COURSES

[Ed. 20. **Seminar in Education.** First term. Credit two hours. Professor FREEMAN. Not given in 1939–40.]

Ed. 21. **Seminar in Education.** Second term. Credit two hours. Admission by permission of the instructor. Professor JORDAN. M 4-6. *Goldwin Smith* 248.

Topics developing from historical and current problems of educational practice, especially as related to administration and conduct of the public school system and of the University. Primarily for graduate students.

[R.E. 234. **Seminar.** First term. Credit two hours. Professor BUTTERWORTH. Not given in 1939-40.]

EDUCATIONAL PSYCHOLOGY AND PSYCHOLOGY

Ed. 1. **Educational Psychology.** Either term. Credit three hours. Not open to freshmen. Lectures and recitations. Doctor WHITE. First term, M W F 11; second term, M W F 10. *Goldwin Smith* 234.

A study of functional psychology with special reference to the learning process and its application to educational theory and practice.

[Ed. 8. **Experimental Education.** Either term. Credit and hours to be arranged. Professor FREEMAN. Not given in 1939-40.]

[Ed. 17. **Mental Development.** First term. Credit two hours. Prerequisite, Education 1 or its equivalent. Professor FREEMAN. Not given in 1939-40.]

Ed. 18. **Individual Differences.** Second term. Credit three hours. Prerequisite, Education 1 or its equivalent. It is desirable, though not required, that Education 7 precede this course. Doctor WHITE. M 2-4, and a third hour to be arranged. *Goldwin Smith* 236.

The nature, causes, and implications of individual differences in abilities, interests, and achievement. Study and observation of atypical and problem groups.

R.E. 110. **Psychology: An Introductory Course.** Either term. Credit three hours. Not open to freshmen. Professor WINSOR. M W F 10. *Plant Science* 233. Fee, \$1.00.

R.E. 111. **Psychology for Students of Education.** First term. Credit three hours. Primarily for prospective teachers of vocational agriculture. Open to juniors and seniors. Assistant Professor BAYNE. M W F 10. *Caldwell* 143. Fee, \$1.00.

R.E. 112. **Psychology for Students of Education.** Either term. Credit three hours. Prerequisite, course 110, Psychology 1, or the equivalent. Open to second-term sophomores, juniors and seniors. Section 1, first term, and both sections, second term are primarily for prospective teachers of vocational agriculture and vocational home economics. Professor KRUSE, Assistant Professor BAYNE, and Doctor GARDNER. First term, M W F 9. Section 1, *Warren Hall* 125. Section 2, *Comstock* 145. Second term, Section 1, M W F 9, *Warren Hall* 125. Section 2, M W F 10, *Warren Hall* 225. Fee, \$1.00.

R.E. 114. **Psychology for Students of Hotel Administration.** First term. Credit three hours. Not open to freshmen. Professor WINSOR. M W F 8. *Caldwell* 100.

R.E. 117. **Psychology of Childhood and Adolescence.** Either term. Credit three hours. Open only to students who have had course 111 or 112 or the equivalent. Doctor GARDNER. Lectures, M W F 10. *Roberts* 392.

R.E. 119. **Personnel Administration.** Second term. Credit three hours. Prerequisite, course 114 or its equivalent. Professor WINSOR. M W F 8. *Plant Science* 233.

R.E. 211a. **Psychology for Students of Education.** First term. Credit three hours. For mature students with teaching experience. Professor KRUSE. Lectures, M F 11-12:20. *Stone* 309.

[R.E. 212. **Psychology of Learning.** Second term. Credit two hours. Professor KRUSE. Not given in 1939-40.]

R.E. 213. **Psychology of Learning in the School Subjects.** First term. Credit two hours. Prerequisite, a course in educational psychology and permission of the instructor to register. Primarily for graduate students. Assistant Professor BAYNE. S 9-11. *East Roberts 223.*

[R.E. 216. **Psychology of the Physically Handicapped Child.** Second term. Credit three hours. Prerequisite, course 111, or 112 or the equivalent. Doctor GARDNER. Not given in 1939-40.]

[R.E. 218. **Seminar in Educational Psychology.** Second term. Credit two hours. Professor KRUSE. Not given in 1939-40.]

R.E. 219. **Seminar in Personnel Administration.** Second term. Credit two hours. Open to qualified seniors and graduate students. Prerequisite, course 119. Professor WINSOR. Th 4:15-6. *East Roberts 223.*

METHOD

Ed. 4. **Methods, Practice, and Extra-Instructional Problems.** Credit nine hours. Assistant Professor HULSE in charge. An integrated course for prospective teachers of academic subjects.

Ed. 4a. **Method and Procedure in High School Teaching.** Either term. Credit three hours. Professor JORDAN and Assistant Professor HULSE. First term, for seniors only. M W F 11. *Goldwin Smith 264.* Second term, for juniors and B seniors. M W F 11. *Goldwin Smith 256.*

Designed for students who expect to teach in secondary schools. Methods of class management, types of recitation, assignment and planning of lessons. Observation of actual high school classes required. Prerequisite to Education 4b and 4d.

Prospective teachers in all academic fields will be assigned to this course to maintain as far as possible two equal groups. One group will take this course in the second term of their junior year, the other group will take this course in the first term of their senior year. Advanced registration required.

Ed. 4b. **Supervised Teaching.** Either term. Credit four hours. For seniors majoring in English and Social Studies. Assistant Professor ANDERSON and Dr. BESIG.

Assignment will be made to the classes of the critic teacher. Practice and observation scheduled daily at a regular hour and the work will be closely integrated with instruction in special method.

Ed. 4c. **Extra-Instructional Problems.** Either term. Credit two hours. Assistant Professor HULSE. M 4. *Goldwin Smith 256.*

A course dealing mainly with problems of extra-instructional nature and designed to acquaint the teacher with the full responsibilities of his position. Taken by all seniors in the term of their practice teaching.

Ed. 4d. **Supervised Teaching.** Either term. Credit two hours. Assistant Professor HULSE, Assistant Professor JOHNSON, and teachers of the Ithaca Senior and Junior High Schools.

Assignments will be made to the classes of the regular teachers in the schools. Each student teacher is required to attend one class each day, five days a week for a term. The work will involve participation and practice under the supervision of the regular teacher and the instructor of the course. The work will be coordinated with special methods.

Special Methods. The following courses are offered by the several departments to satisfy the two-hour requirement in special method:

Teacher's Training Course. See Latin 26.

[**Teacher's Course in Methods.** See German 40. Not given in 1939-40.]

[**Teacher's Course.** See Mathematics 20. Not given in 1939-40.]

Teaching of Science in the Secondary School. See Rural Education 126.

Ed. 4e. **Conference and Special Problems.** Either term. Credit two hours. Hours to be arranged. Assistant Professor HULSE.

Conference with the instructor in charge and the study of special problems supplementing the practice of teaching.

R.E. 121. **Method and Procedure in Secondary School Teaching.** First term. Credit three hours. Prerequisite, course 111, 112 or the equivalent. Open to juniors and seniors. Professor FERRISS. Lectures, M W F 11. *Plant Science* 141.

The development of certain principles of teaching in secondary schools and their application to practical problems of teaching, such as objectives, selecting and organizing teaching materials, making the assignment, directing study, and so forth.

R.E. 126. **The Teaching of Science in the Secondary School.** Either term. Credit two hours. Open to seniors and graduates on the approval of the instructor. Assistant Professor JOHNSON. Th 4:15-5:45. *Fernow* 14.

Special methods for teaching science and the organization of science materials in the secondary school. This course is correlated with student teaching in science.

R.E. 127. **Observational Aids in Teaching.** Second term. Credit two hours. Assistant Professor JOHNSON. M W 11. *Fernow* 14.

A course dealing with methods for collecting, preparing and evaluating materials available as visual or other aids, together with a study of techniques for using such aids effectively. Special emphasis is given to subjects commonly taught in elementary and secondary schools. Students are assisted in applying the methods and techniques to special fields.

R.E. 129. **Teaching Adaptations for the Atypical Child.** Second term. Credit three hours. Prerequisite, course 111 or 112 or the equivalent. Doctor GARDNER. S 9-11:30. *Warren Hall* 140.

Consideration, with demonstrations, of special techniques of teaching adapted to the needs of atypical children.

R.E. 31. **Planning for the Teaching of Agriculture.** Either term. Credit one hour. Open to sophomores who are planning to teach agriculture in the public schools and to others by permission. Important for preparation to teach vocational agriculture. Assistant Professor SMITH, assisted by other members of the staff in Agricultural Education. First term, Th 10. *Warren Hall* 101. Second term, Th 9. *Warren Hall* 140.

R.E. 131. **Introduction to Teaching in Vocational Agriculture.** Either term. Credit three hours. Must be preceded or accompanied by course 111 or 112 or the equivalent. Open by permission only to students whose practical experience and grades are satisfactory, and whose progress in the prescribed courses in technical agriculture is adequate. Assistant Professor SMITH. Lecture, T Th 11. First term, *Warren Hall* 101. Second term, *Plant Science* 37. Laboratory, M 1:40-4 each term. *Plant Science* 37.

A consideration of the organization of programs of instruction in vocational agriculture; of opportunities and responsibilities in teaching, and of appropriate teacher qualities. Observation of teaching in typical departments; general preparation for course 132. Laboratory fee, \$3.

R.E. 132. **The Teaching of Agriculture in the Secondary School.** Throughout a full year in two sequences, beginning in either term. Credit three hours each term. Open to juniors and seniors who have completed either 111 or 112 and 131 or equivalents, whose farm experience is adequate, and who have permission to register. Assistant Professors HOSKINS and OLNEY. Sequence 1, beginning the first term, T Th 9. *Warren Hall* 201. Sequence 2, beginning the second term, T Th 10. *Warren Hall* 201. Laboratory each term, to be arranged.

A study of the problems of teaching based upon the planning for and participation in teaching. Opportunity is provided for experience in organizing course materials, in equipping departments, and in planning programs for special groups. Laboratory fee, \$5 a term.

R.E. 133. **Directed Teaching of Pupils in Vocational Agriculture.** Either term. Credit to be arranged. Registration by permission. Assistant Professor OLNEY. Fee, \$3 a term.

R.E. 134. **Adult Education.** First term. Credit three hours. Designed for vocational students. Professor MOORE. M W F 11. *Warren Hall* 125.

A consideration of the developments, trends, opportunities and problems of adult education.

[R.E. 134a. **Special Agricultural Education for Out-of-School Youth and Adults.** First term. Credit three hours. Assistant Professor HOSKINS. Not given in 1939-40.]

R.E. 134b. **Adult Homemaking Education. Leadership in Home Economics.** (H.E. 310 and H.E. 320.)

[Home Economics 310. First term. Credit three hours. Miss HENDERSON. Not given in 1939-40.]

Home Economics 320. Second term. Credit three hours. Miss HENDERSON. Discussions, M F 11-12. *Martha Van Rensselaer* 343.

For extension workers, home economics teachers, and others interested in homemaking education.

R.E. 135. **The Teaching of Home Economics in the Secondary School.** Either term. Credit three hours. Prerequisite, course 111, 112 or the equivalent. Required of all students preparing to teach home economics. Miss ————. Lecture, Th 2-4:20. First term, *Warren Hall* 340. Second term, ————.

One period daily for observation and participation in the Ithaca Junior High School throughout the semester. Schedules must be approved by the Department of Rural Education.

This course undertakes to interpret present-day educational theories and practices as applied to home economics; to study the activities in which the home economics teacher engages, and the factors which make for successful performance; to induct students into teaching through graded participation in the home arts department of the Ithaca Junior High School. Fee, \$2.

R.E. 136. **Directed Teaching of Home Economics in the Secondary School.** Either term. Credit four hours. Prerequisite, course 135. Open to seniors who have successfully completed prerequisites in Education and have been approved by a committee composed of members of the faculties of Home Economics and Rural Education. Professor BINZEL and Misses HASTIE and COWLES. General conferences, S 8-10. *Stone* 309.

Schedules must provide three entire days a week, or the equivalent, over a period of five weeks for directed teaching. Visits to schools for the purpose of studying furnishings and equipment are a part of the course. Fee, \$10.

R.E. 137. **Extra-Instructional Problems.** Either term. Credit two hours. First term for prospective teachers of home economics only. Second term primarily for prospective teachers of science and home economics. Professor FERRISS. T Th 9. First term, *Plant Science* 143. Second term, *Plant Science* 141.

This course is designed to deal with problems confronting the teacher in the performance of those duties and the meeting of those responsibilities in the school that extend beyond the classroom and class instruction.

R.E. 226. **Seminar in Science Teaching.** Either term. Credit one or two hours each term. Professor PALMER and Assistant Professor JOHNSON. M 4:30. *Fernow* 8.

Special problems in science teaching.

[R.E. 227. **Seminar in Elementary Education.** First term. Credit two hours. Professor MOORE. Not given in 1939-40.]

[R.E. 228. **Seminar in Behavior and Guidance.** (Family Life 350.) Second term. Credit two hours. For graduate students who have had some work in child guidance. Professor WARING. Not given in 1939-40.]

Ed. 230. **Seminar in Social Studies Education.** Either term. Credit as arranged. Assistant Professor ANDERSON. M 4:15. *Boardman* 14.

Students working on theses, critical papers, or other research projects in this field may register for the course.

[R.E. 232. **Advanced Problems of Teaching in Vocational Agriculture.** Second term. Credit two hours. Assistant Professor HOSKINS. Not given in 1939-40.]

R.E. 233. **Apprentice Teaching in Vocational Agriculture.** Either term. Credit to be arranged. Assistant Professor HOSKINS in charge, assisted by other members of the staff in Agricultural Education.

Certain students with advanced experience in directed teaching may be permitted to accept regular teaching responsibilities in the schools under staff supervision.

[R.E. 240. **Cooperative Extension Work.** Second term. Credit three hours. Open to graduate students qualified in agriculture or home economics. Professor ———. Not given in 1939-40.]

PREPARATION OF TEACHERS FOR NORMAL SCHOOLS AND COLLEGES

R.E. 241. **The Preparation of Teachers for Normal Schools and Colleges.** Second term. Credit two hours. Professor MOORE. M 4-6. *Caldwell* 143.

To meet the needs of those responsible for the training of teachers for rural elementary and secondary schools.

[R.E. 245. **The College Preparation of Teachers of Agriculture for the Secondary School.** Second term. Credit three hours. Given in 1940-41. Professor STEWART. Not given in 1939-40.]

[R.E. 248. **The Preparation of Teachers of Home Economics for Secondary Schools.** Second term. Credit two hours. Professor THURSTON. Not given in 1939-40.]

R.E. 249. **Seminar in Home Economics Education.** First and second terms. Credit two to four hours either term. Total credit for the year not to exceed four hours. Hours to be arranged. Students will need to consult instructor before registering. Professor THURSTON.

Designed to meet the needs of graduate students who have had experience as home economics educators in schools, colleges, extension service, business, etc. Arrangements will be made for students to work on their individual problems. Courses in philosophy and principles of education, psychology, curriculum, and measurement are recommended as prerequisites or parallel.

R.E. 250. **Seminar in Agricultural Education.** Second term. Credit two hours. Open only to students whose progress in graduate study is satisfactory. Assistant Professor SMITH. T 4-5:30. *Stone* 309.

The selection, adaptation, and evaluation of materials of teaching.

MEASUREMENT AND STATISTICS

Ed. 7. **Mental Measurements.** First term. Credit three hours. By permission of the instructor, candidates for the principal's certificate may enroll for two hours credit. Prerequisite, Education I or equivalent. Doctor WHITE. T Th S 9. *Goldwin Smith* 225.

The nature of intelligence. History of the development of individual and group tests of intelligence; principles underlying their construction and application; the use of tests of intelligence in school problems with atypical children and in fields outside the school. Use of educational tests. Demonstration in administering tests.

R.E. 251. **Educational Measurement.** Second term. Credit three hours. Candidates for the principal's certificate may register for two hours credit. Prerequisite, a course in educational psychology. Open to graduate and upper-class students. Assistant Professor BAYNE. T Th 10 and additional hour to be arranged. *Stone* 309.

The use of aptitude and achievement tests and other measuring instruments in the classification and guidance of pupils, improvement of instruction and other

activities of the teacher and school officer. Those class members who wish may make a study of their own aptitudes and achievements.

R.E. 253. **Statistics for Students of Education.** First term. Credit two hours. Primarily for graduate students in education. Open to a limited number of other students upon approval of the instructor. Assistant Professor BAYNE. T Th 10. *East Roberts 223.*

A study of common statistical procedure in relation to critical reading of technical studies, research, and writing reports of studies. As far as possible the work is related to the problems of the individual student.

ADMINISTRATION AND SUPERVISION

Ed. 10. **High School Administration.** Second term. Credit two hours. For seniors, graduates, and other qualified students. Professor JORDAN. W F 3. *Goldwin Smith 236.*

Principles relevant to administration of the senior and junior high school; classification of pupils; program making; curriculum problems; the principal as supervisor; pupil guidance; duties of the principal in both large and small high schools.

Ed. 11. **Extra-classroom Activities.** First term. Credit two hours. For seniors and graduates. Professor JORDAN. M 4-6. *Goldwin Smith 236.*

A study of the place extra-classroom activities should assume in the school program. General principles involved, with special attention given to athletics, dramatics, publications, school finance, music, debate, and school clubs.

Ed. 12. **The Junior High School.** First term. Credit three hours. For seniors, graduates, and other qualified students. Professor JORDAN. M W F 9. *Goldwin Smith 248.*

Psychological, biological, and pedagogical bases for the Junior High School; fundamental principles; organization and administration; curricular content in detail; methods of instruction.

R.E. 246. **Problems in Industrial and Technical Education.** First and second terms. Credit four hours each term. Professor EMERSON. T Th 2-4. *Stone 309.*

Special problems in the administrative, supervisory, and curricular phases of industrial and technical education.

R.E. 261. **The Administration of Rural Schools.** First term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. T Th 11 and an additional hour to be arranged. Professor BUTTERWORTH. *Stone 309.*

A course for students of experience dealing with the problems of organizing and administering education in the elementary and secondary schools of country and village districts.

R.E. 262a. **School Finance.** Second term. Credit two hours. Professor BUTTERWORTH. S 10-11:30. *Stone 309.*

Typical problems: how local school funds are levied, collected, and disbursed; cost accounting; budget making; bonding; sources of state funds and their distribution. The discussion is based upon actual problems; prospective members of the class are urged, therefore, to bring with them financial data regarding their schools.

[R.E. 262c. **The School Plant.** Second term. Credit two hours. Professor BUTTERWORTH. Not given in 1939-40.]

R.E. 263. **Procedures and Techniques in Supervision.** First term. Credit three hours. Candidates for the principal's certificate may register for two hours credit. Professor MOORE. M W F 10. *Stone 309.*

Designed for superintendents, supervisors, and principals. Students who have not had experience in these fields will be admitted only upon permission of the instructor. Students taking this course must be prepared to spend four full days or more in observing supervisory procedures in various school systems.

[R.E. 264. **Seminar in Rural School Administration.** Second term. Credit two hours. Professor BUTTERWORTH. Not given in 1939-40.]

[R.E. 265. **Seminar for Principals.** Second term. Credit two hours. Required of all graduate students who are candidates for a principal's certificate. Professor FERRISS. Not given in 1939-40.]

R.E. 266. **The Supervision of the Elementary School Subjects.** Second term. Credit three hours. Candidates for a principal's certificate may register for two hours credit. Professor MOORE. M W F 9. *Stone* 309.

A course designed for supervisors, elementary school principals, and superintendents. It includes a consideration of important research studies which have a direct bearing upon the teaching and supervision of the elementary school subjects.

R.E. 267. **The Organization and Administration of Vocational Agriculture in the Public Schools.** First term. Credit three hours. Should follow or accompany course 261. Professor STEWART. M W F 10. *East Roberts* 223.

Designed primarily for persons preparing to organize, administer and supervise agricultural education. Participation in teacher observation; special problems; and directed supervision make up a part of the program.

R.E. 269. **The Supervision of Home Economics Education.** Second term. Credit two hours. Time to be arranged. Students will need to consult instructor before registering. Professor THURSTON.

For persons who are now engaged in the functions of supervision and in the education of teachers and leaders in service and for those who wish to prepare for such work.

R.E. 276. **Principles of Curriculum Building.** Second term. Credit three or four hours. Primarily for graduate students. Professor FERRISS. T Th 2-3:30, and an additional hour to be arranged for those who wish to carry further the study of special curriculum problems. *Warren Hall* 340.

A consideration of major problems, principles and techniques in determining educational objectives and curriculum content and organization in elementary and secondary schools in the light of modern theory and practice.

R.E. 277. **Courses of Study in Vocational Agriculture.** Second term. Credit two hours. Students should have had either 276 or 281. Assistant Professor HOSKINS. Th 4:15-5:45. *Roberts* 492.

An evaluation of curriculum studies in agricultural education as a basis for the reconstruction of vocational courses in agriculture for secondary schools; relationships of units of instruction to long-time supervised practice programs.

R.E. 278. **Seminar in Rural Secondary Education.** Second term. Credit two hours. Professor FERRISS. M 4-6. *Stone* 309.

Designed for those desiring to study problems of secondary education in its adaptation to rural and village communities.

HISTORY OF EDUCATION

[Ed. 3. **History of Education.** (a) (Greek, Roman, and Early Medieval.) First term. Credit two hours. Open to upperclassmen and graduates only. Professor LAISTNER. (See History 7.) (b) (Late Medieval and Modern.) Second term. Credit two hours. Open to upperclassmen and graduates only. Professor SMITH. (See History 36.) Not given in 1939-40.]

Ed. 13. **History of American Education.** First term. Credit three hours. Prerequisite, Education 1 or its equivalent. Assistant Professor HULSE. T Th S 10. *Goldwin Smith* 236.

A survey of educational change in the United States from the beginning of the seventeenth century to the present, with special emphasis on public schools, and consideration of the religious, economic, political, and social factors affecting education. European influences throughout the period will also be considered briefly.

Ed. 16. **Readings in the History of Education.** Second term. Credit two hours. Consent of instructor is required. Assistant Professor HULSE. Hours to be arranged. *Goldwin Smith* 251.

An advanced course, emphasizing the historic changes in aims and methods.

EDUCATIONAL THEORY

Ed. 2. **Principles of Secondary Education.** Either term. Credit three hours. Not open to sophomores. Prerequisite, Education 1. Professor JORDAN. M W F 2. *Goldwin Smith* 234.

The nature and significance of education; biological and psychological foundations; the secondary school as a social institution; educational ideas and values; the curriculum.

[Ed. 5. **Theory of Education.** Second term. Credit two hours. For seniors and graduate students. Prerequisite, Education 1 or the equivalent. Professor OGDEN. Not given in 1939-40.]

Ed. 130. **Social Foundations of Education.** Second term. Credit three hours. Assistant Professor ANDERSON. T Th S 9. *Boardman* B.

For students who are following the newly established five-year program in teacher training. The course treats the school as a social institution, and places special emphasis on the functions of education in American democracy.

R.E. 181. **Principles of Education.** Either term. Credit three hours. Prerequisite, a first course in educational psychology. One section first term; two sections second term. Open to students as indicated by sections. First term, M W F 11. Open only to seniors and graduate students preparing to teach. Second term: Section 1, M W F 9. Open only to seniors and graduate students preparing to teach. Section 2, M W F 11. Open to juniors preparing to teach science and to seniors and graduate students preparing to teach. Professors MOORE and EATON. *Caldwell* 143.

A consideration of fundamental principles in education, with special attention to the needs of prospective teachers in the high school.

R.E. 194. **Principles of Vocational Education.** First term. Credit three hours. Open to seniors and graduate students who have completed satisfactorily courses in educational psychology and economics or sociology. Professor EATON. T Th S 10. *Stone* 309.

A study of the nature, the aims and the socio-economic backgrounds of vocational education.

R.E. 281. **Rural Secondary Education.** First term. Credit three hours. Primarily for graduate students. Professor FERRISS. M W F 9. *Stone* 309.

A consideration of some of the more basic problems in the functions, nature, organization, curriculum, and extension of secondary education in its adaptation to rural and village needs and conditions.

R.E. 294. **Philosophy of Education.** Second term. Credit three hours. Open to graduate students whose studies in education are well advanced. Professor EATON. M W F 11. *Stone* 309.

An examination of major concepts in education, and of material, spiritual, and social criteria of value in their bearings upon the aims and processes of education.

R.E. 295. **Comparative Education.** First term. Credit two hours. Professors BUTTERWORTH, FERRISS, and MOORE. S 11-12:30. *Stone* 309.

A consideration of the educational systems of certain European countries.

NATURE STUDY

R.E. 107. **The Teaching of Nature Study and Elementary-School Science.** Second term. Credit three hours. Open to those who have taken or are completing thirty hours in science and have had at least one term of suitable professional work. Professor PALMER and Miss GORDON. Lecture, M 12. Practical exercises, T Th 1:40-4. *Fernow* 8.

A study of the content and methods of nature-study and elementary-school-

science programs, with consideration of their significance to agriculture and to secondary-school science. Recommended for those preparing to teach or supervise science. Laboratory fee, \$1.50.

R.E. 108. **Field Natural History.** First term. Credit two hours. Not open to freshmen. Professor PALMER and Miss GORDON. Lectures, Th 1:40-2:30. Field work, Th 2:30-5. *Fernow* 8.

Field trips and lectures devoted to a study of the natural history of five ecological units under different seasonal conditions with special emphasis on their contributions to the teaching of science.

[R.E. 202. **Nature Literature.** First term. Credit two hours. Open to students who will have completed their preparation for certification as science teachers by the end of the current year. Professor PALMER and Miss GORDON. Not given in 1939-40.]

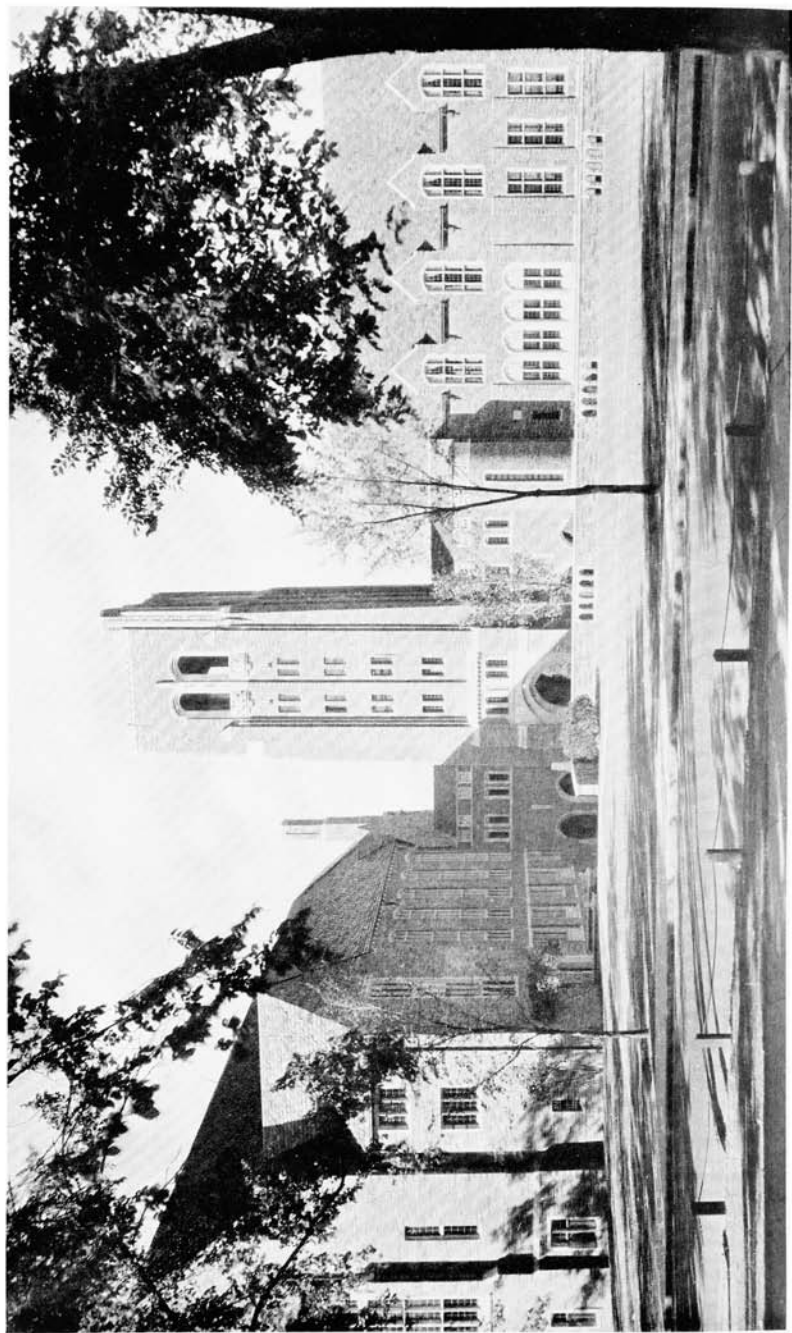
R.E. 209. **The Nature Movement and Its Makers.** First term. Credit two hours. Professor PALMER and Miss GORDON. M W 10. *Fernow* 8.

Discussion of the history of the nature movement, with special consideration of its influence on, and its relation to, the teaching of science in elementary and secondary schools. Studies are made of the present and past status of nature and science education.

RESEARCH

300. **Special Studies.** Credit as arranged. Members of the staff.

Students working on theses or other research projects may register for this course. The staff members concerned must be consulted before registration.



MYRON TAYLOR HALL

Gift of Myron C. Taylor of the Class of 1894. Designed for and occupied by the Cornell Law School.